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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,120	02/22/2002	James W. Forbes	5699-11-CON	9348

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EXAMINER

JULES, FRANTZ F

ART UNIT	PAPER NUMBER
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3617

DATE MAILED: 06/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/081,120

Applicant(s)

FORBES, JAMES W.

Examiner

Frantz F. Jules

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 13-21, 24, 28, 29, 32-34, 41-54 and 57-83 is/are pending in the application:
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 28, 29 and 32-34 is/are allowed.
- 6) ☒ Claim(s) 1-3, 6, 13, 20, 21, 24, 41-47, 55, 57-61, 63, 64, 66-72 and 78-83 is/are rejected.
- 7) ☒ Claim(s) 4, 5, 7, 14-19, 62, 65 and 73-77 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 13, 20, 41-45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 13, lines 3-4, the phrase "said second rail car truck is located closer to said second end of said first rail car unit than to said second end of said first rail car unit" is confusing as it is unclear how can the second rail car truck be located closer to the second end of the first rail car unit than to the second end of the first rail car unit.

Claim 20 recites the limitation "said side bearing arms" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

In claim 41, line 9, the word "trucks" is confusing as it is unclear how it relates to previously recited first, second and third trucks above. Similar confusing term exists in claim 41, line 10.

Claims 42-45 are rejected as being dependent upon rejected base claim 41.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 1-3, 6, 20-21, 24, 46-47, 58, 66-68, 72 are rejected under 35

U.S.C. 102(b) as being anticipated by Lich (US 3,371,622).

Claims 1-3, 6, 20-21, 24, 46-47, 58, 66-68, 72

Lich teaches all the limitations of claims 1-3, 6, 20-21, 24, 46-47, 58, 66-68, 72 by showing in figs. 1-5, an articulated railroad freight car comprising at least first and second railcar units (3, 1) connected at a cantilevered articulation (51), said railroad freight car (20) having a first end, a second end, and a releasable coupler (45) mounted at each of said first and second ends, said releasable couplers (22) being operable to permit interchangeable operation with other railroad freight cars in North American service.

The first railcar unit having a first and second end (A, B), said second railcar unit having a first and second end (C, D); said second end (B) of said first railcar unit is joined to the first end (D) of the second railcar unit at a first articulation connection (51); the second railcar unit (1) is supporting upon a pair of pivotally mounted, spaced apart, first and second two-axle railcar trucks (8, 5), each of said trucks having a truck center, said first truck (8) of said second rail car unit is located closer to said first articulation connection (51) than any other truck of said railroad car, and said first articulation connection (51) being longitudinally eccentrically offset from said truck center of said truck or relative to the first truck as shown in figs. 4-5 in accordance with claims 1, 6, 66, and 72, see column 2, lines 24-25.

Said articulation connection is cantilevered longitudinally relative to the truck center axis in accordance with claim 2.

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Said first and second railcar units (3, 1) have mutually engaging side bearing arms constituted by members (33, and 23) having upward and downward bearing surfaces in accordance with claim 20.

Said first car unit has a main bolster (13) mounted over said first truck and a through center sill (9) extending longitudinally outboard therefrom (as can be seen in fig. 3 of the drawings, end D of unit 1 is constructed in a similar manner as end A of unit 3), said center sill has a distal end B longitudinally distant from the main bolster; and said articulation connection is mounted to said distal end of the center sill (9) since member 45 is connected to the center sill at 43 in accordance with claims 21, and 24.

The first railcar unit has a two-axle truck (7) pivotally mounted thereunder, and said two axle truck of said first railcar unit is located closer to the first end (A) of the first railcar unit than to said second end (B) of the first railcar unit in accordance with claim 67.

The first end (A) of the first railcar unit (3) having a coupler mounted therein as shown in fig.1 in accordance with claim 68.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 48-49, 51-52, 57, 59-61, 63-64, 69-71, 78-79, 81-83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lich (US 3,371,622) in view of Ehrlich et al (US 5,622,115).

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Claims 48-49, 51-52, 78-79, 81-82

Lich discloses an articulated railroad freight car comprising at least first and second railcar units (3, 1) connected at a cantilevered articulation (51), said railroad freight car (20) having a first end, a second end, and a releasable coupler (45) mounted at each of said first and second ends, said releasable couplers (22) being operable to permit interchangeable operation with other railroad freight cars in North American service.

The first railcar unit having a first and second end (A, B), said second railcar unit having a first and second end (C, D); said second end (B) of said first railcar unit is joined to the first end (D) of the second railcar unit at a first articulation connection (51); the second railcar unit (1) is supporting upon a pair of pivotally mounted, spaced apart, first and second two-axle railcar trucks (8, 5), each of said trucks having a truck center. Each of said rail car has at least one deck upon which vehicles can be loaded. Each of said railcar unit has mutually engaging side bearing arms (33, 23).

Lich teaches all the limitations of claims 48-49, 51-52, 78-79, 81-82 except for an articulated railroad freight car being an auto-rack car with intermediate bridge plates to allow vehicles to be conducted between the railcars. The general concept of providing an auto-rack car with intermediate bridge plates to allow vehicles to be conducted between the railcars in a railroad freight car is well known in the art as illustrated by Ehrlich et al which discloses the use of an auto-rack car with intermediate bridge plates to allow vehicles to be conducted between the railcars in a freight car, see fig. 1. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lich to include the use of an auto-rack car with intermediate bridge plates to allow

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vehicles to be conducted between the railcars in his advantageous articulated railroad freight car as taught by Ehrlich et al in order to provide a bridge between two adjacent railcars for transit of vehicles, maximize the use of the freight car.

Claims 57, 59-61, 63-64, 69-71, 83

Lich discloses an articulated railroad freight car comprising at least first and second railcar units (3, 1) connected at a cantilevered articulation (51), said railroad freight car (20) having a first end, a second end, and a releasable coupler (45) mounted at each of said first and second ends, said releasable couplers (22) being operable to permit interchangeable operation with other railroad freight cars in North American service.

The first railcar unit having a first and second end (A, B), said second railcar unit having a first and second end (C, D); said second end (B) of said first railcar unit is joined to the first end (D) of the second railcar unit at a first articulation connection (51); the second railcar unit (1) is supporting upon a pair of pivotally mounted, spaced apart, first and second two-axle railcar trucks (8, 5), each of said trucks having a truck center. Each of said rail car has at least one deck upon which vehicles can be loaded. Each of said railcar unit has mutually engaging side bearing arms (33, 23).

Lich teaches all the limitations of claims 57, 59-61, 63-64, 69-71, 83 except for an articulated railroad freight car having a third single truck coupled to a two-truck middle unit forming a three-pack railroad with intermediate bridge plates to allow vehicles to be conducted between the railcars. The general concept of providing a third single truck coupled to a railroad train consist with intermediate bridge plates to allow vehicles to be conducted between the railcars in a railroad freight car is well known in the art as

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illustrated by Ehrlich et al which discloses the use of a single truck coupled to a two-truck middle unit forming a railroad train consist with intermediate bridge plates to allow vehicles to be conducted between the railcars, see fig. 1. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lich to include the use of a third single truck coupled to a two-truck middle unit forming a three-pack railroad with intermediate bridge plates to allow vehicles to be conducted between the railcars in his advantageous articulated railroad freight car as taught by Ehrlich et al in order to reduce the weight of the end unit railroad cars, provide a bridge between two adjacent railcars for transit of vehicles.

7. Claim 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lich.

Claim 54

Regarding using a freight car which is a well car unit as recited in claim 54, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lich to include the use a freight car which is a well car unit in his advantageous system, as freight car design is a common and everyday occurrence throughout the articulated railroad car design art and the specific use of a freight car which is a well car unit would have been an obvious matter of design preference depending upon such factors as the weight of the object to be carried by the railroad car, the yield strength of the side walls material; the ordinarily skilled artisan choosing the best stress profile corresponding to a particular loading imposed on the side walls which would most optimize the cost and performance of the device for a particular application at hand, based upon the above noted common design criteria.

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Allowable Subject Matter

8. Claims 4-5, 7, 14-19, 62, 65, 50, 53, 62, 73-77, 80 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Claim 13 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

10. Claims 28-29, 32-34, 41-45 stand allowable.

Response to Arguments

11. Applicant's arguments with respect to claims 47-54, 57-83 filed 04/15/03 have been fully considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Buccos, Schunk, and Reilly are cited to show related articulated railroad freight car having cantilevered coupler and side arms.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frantz F. Jules whose telephone number is (703) 308-8780. The examiner can normally be reached on Monday-Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph S. Morano can be reached on (703) 308-0230. The fax phone

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numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Frantz F. Jules
Examiner
Art Unit 3617

FFJ

June 7, 2003



S. JOSEPH MORANO
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